

AMENDMENTS TO THE CLAIMS

- 1. (currently amended) Aqueous dispersions of non-ionic -N=C=O blocked polyisocyanates obtained from the reaction of:
- (i) a polyisocyanate;
- (ii) a thermally de-blockable -N=C=O blocking agent; and
- (iii) a non-ionic alkoxylated diol having a general formula I:

$$R_1CH_2O$$
-(- CH_2CH_2O)_n-(CH_2CHCH_3O)_m- R_2

(I)

wherein:

or

$$R_1 = R_3 - C - CH_2$$

$$HO$$

$$HO$$

$$CH_2$$

$$HO$$

$$CH_2$$

$$HO$$

$$(III)$$

=

and R^2 and R_3 are the same or different and are selected from the group consisting of methyl, ethyl, n-propyl, i-propyl, n-butyl, and i-butyl;

n is a number from 0-40;

m is a number from 0-40; and

n+m is a number from 20 to 80; and

wherein the equivalent ratio between the polyisocyanate and the non-ionic alkyloxylated diol is such that the percentage of free isocyanate groups in the non-ionic –N=C=O blocked polyisocyanates is from 3 to 10 percent.

- (original) Aqueous dispersions of non-ionic blocked polyisocyanates according to claim 1., wherein n + m is a number from 20 to 40.
- 3. (previously presented) Aqueous dispersion of non-ionic –N-C-O blocked polyisocyanates according to claim 1.wherein the non-ionic alkoxylated diol (iii) has the general formula I:

$$R_1CH_2O\text{-}(\text{-}CH_2CH_2O)_{\textbf{n}}\text{-}(CH_2CHCH_3O)_{\textbf{m}}\text{-}R_2$$

(I)

wherein:

and R₂ is methyl, R₃ is ethyl, n is a number from 15 to 30 and m is a number from 0 to 10.

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- 4. (previously presented) Aqueous dispersions of non-ionic –N=C=O blocked polyisocyanates according to claim 1., wherein the polyisocyanate (i) is an isocyanurate obtained from 1,6-hexamethylenediisocyanate and a reaction product of trimethylol propane and toluenediisocyanate.
- (previously presented) Aqueous dispersions of non-ionic -N=C=O blocked polyisocyanates according to claim 1., wherein the blocking agent (ii) is 3,5-dimethylpyrazole.
- 6. (previously presented) A process for the preparation of aqueous dispersions of non-ionic -N=C=O blocked polyisocyanates comprising the steps:
- a. a polyisocyanate (i) and a non-ionic alkoxylated diol (iii) of the general formula:

$$R_1CH_2O\text{-}(-CH_2CH_2O)_n\text{-}(CH_2CHCH_3O)_m\text{-}R_2 \end{tabular}$$
 (I)

wherein

$$R_1 = \begin{array}{c} HO \longrightarrow CH_2 \\ CH \longrightarrow HO \end{array}$$

or

and R² and R₃ are the same or different and are selected from the group consisting of methyl, ethyl, n-propyl, i-propyl, n-butyl, and i-butyl;

n is a number from 0-40;

n is a number from 0-40; and

n+m is a number from 20 to 80.

are reacted at a temperature of 30°-120°C, their equivalent ratio being such that the percentage of free isocyanate groups in the resulting oligomer is from 3 to 10 and the percentage in weight of ethoxy groups is from 10 to 40%;

- the thus obtained oligomer is reacted with an amount of a blocking agent (ii) such that the
 equivalent ratio of the isocyanate groups of the oligomer and the blocking agent(ii) if
 from 1:0.98 to 1:1.30; and
- the thus obtained mixture is dispersed into water under vigorous stirring to obtain a dispersion having a solid content of from 20 to 40% by weight.

7. (previously presented) Process for the preparation of aqueous dispersions of non-ionic -N=C=O blocked polyisocyanates according to claim 6., wherein the non-ionic alkoxylated diols (iii) have the general formula I:

$$R_1CH_2O$$
-(- CH_2CH_2O)_n-(CH_2CHCH_3O)_m- R_2

(I)

wherein:

$$R_1 = R_3 - C - CH_2$$

$$HO$$
(III)

and R₂ is methyl, R₃ is ethyl, n is a number from 15 to 30 and m is a number from 0 to 10.

- 8. (previously presented) Process for the preparation of aqueous dispersions of non-ionic
- -N=C=O blocked polyisocyanates according to claim 6. wherein the polyisocyanate (i) is an isocyanurate obtained from 1,6-hexamethylenediisocyanate and a reaction product of trimethylol propane and toluenediisocyanate.
- 9. (previously presented) Process for the preparation of aqueous dispersions of non-ionic
- -N=C=O blocked polyisocyanates according to claim 6. wherein the step b. is preceded by dilution of the reaction mixture obtained in a. with from 0.10 to 0.50 parts by weight of a water mixable polar solvent.
- 10. (previously presented) Process for the preparation of aqueous dispersions of non-ionic
- -N=C=O blocked polyisocyanates according to claim 9, wherein the water mixable polar solvent is selected from the group consisting of methyl ethyl ketone, acetone, and cyclohexanone.
- 11. (previously presented) Process for the preparation of aqueous dispersions of non-ionic -N=C=O blocked polyisocyanates according to claim 6., wherein in step a. the equivalent ratio of

polyisocyanate (i) and alkoxylated diol (iii) is such that the percentage in weight of the ethoxyl groups is from 20 to 30%.

- 12. (previously presented) Process for the preparation of aqueous dispersions of non-ionic

 -N=C=O blocked polyisocyanates according to claim 6., wherein the blocking agent (ii) is from the group consisting of butanone oxime and 3.5-dimethylpyrazole.
- 13. (previously presented) Process for the preparation of aqueous dispersions of non-ionic

 -N=C=O blocked polyisocyanates according to claim 6., wherein the amount of blocking agent

 (ii) is such that the equivalent ratio of the isocyanate groups of the oligomer and the blocking agent (ii) is from 1:1 to 1:1.2.
- 14. (previously presented) Process for the preparation of aqueous dispersions of non-ionic —N=C=O blocked polyisocyanates according to claim 6., wherein in step c. the mixture is dispersed into water under stirring to obtain a dispersion having a solid content of from 25 to 35% by weight.
- 15. (previously presented) Procedure for the oil- and/or water-repellent finishing of textiles, characterized by the fact that, as a finishing agent, an aqueous composition is used, said aqueous composition comprising an organic perfluorinated polymeric compounds and from 0.1 to 10% by weight of the total weight of the composition, of an aqueous dispersion of a non-ionic –N=C=O blocked polyisocyanates according to claim 1., the weight ratio between the solid fraction of the aqueous dispersion and the perfluorinated polymeric organic compounds being from between 1:1 and 1:15.

- 16. (previously presented) A textile printing paste comprising from 0.3 to 5% by weight of an aqueous dispersion of claim 1.
- 17. (previously presented) The textile printing paste of claim 16., wherein the aqueous dispersion of claim 1. is present at a concentration of from 1 to 3.5%.
- 18. (previously presented) Aqueous dispersion according to claim 4., wherein the toluenediisocyanate is composed of 2,4 and 2,6 isomers being in a weight ratio of 80:20.
- 19. (previously presented) Process fro the preparation of aqueous dispersion according to claim 8., wherein the toluenediisocyanate is composed of 2,4 and 2,6 isomers being in a weight ratio of 80:20.